

Fig. 1

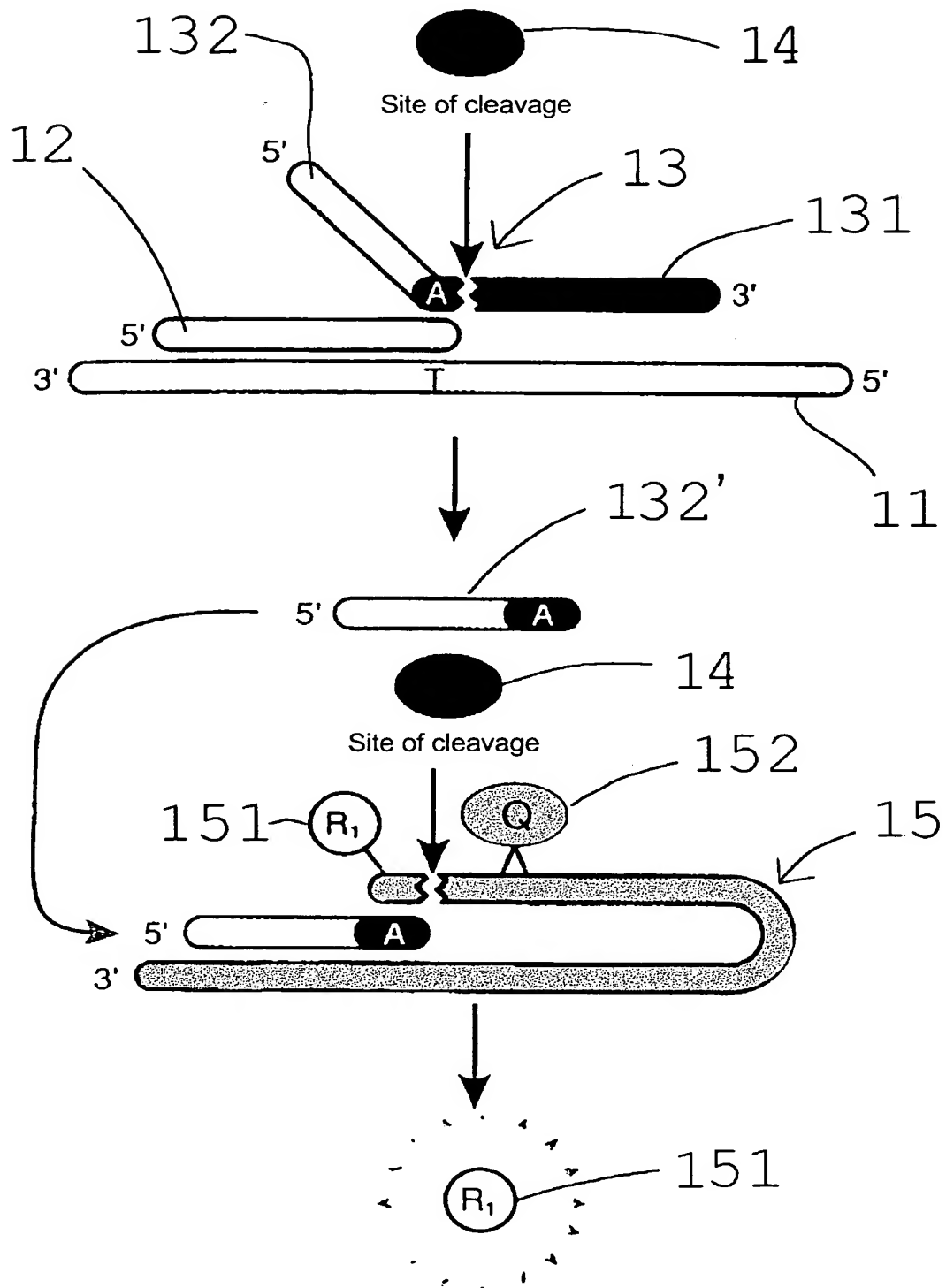


Fig. 2

Wild type

950 940 930
 3' - AAGACCAACAACACGAGAGTACTAAGTGA - 5'
 GluProThrGlnAlaArgLeuSerGluSer

Mutant type

315 313 310
 GluProThrGlnAlaGlyLeuSerGluSer

950 940 930
 3' - AAGACCAACAACACGAGGTTACTAAGTGA - 5'
 3' - TTCTGGTGTTGTGCTCCCAATGATTCACT - 5'

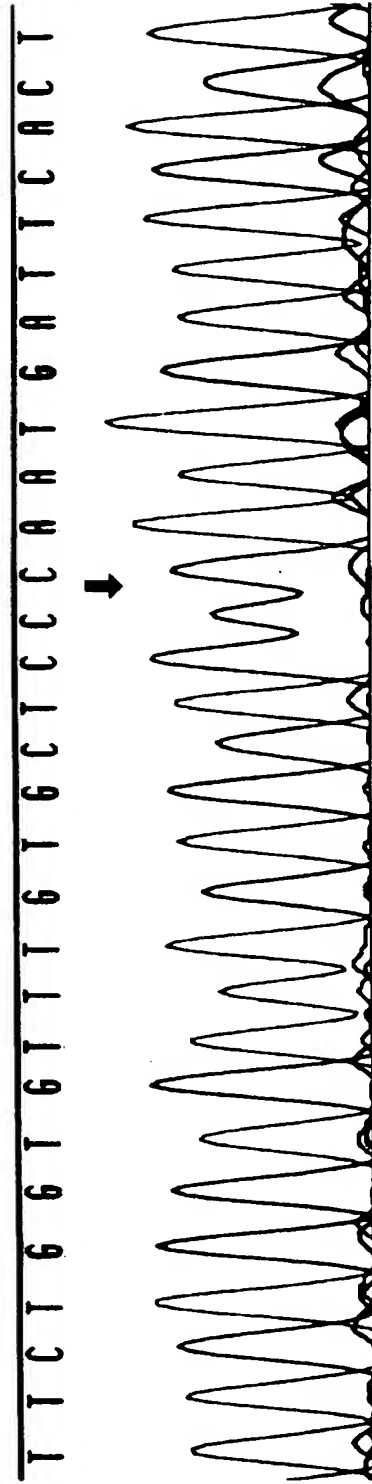
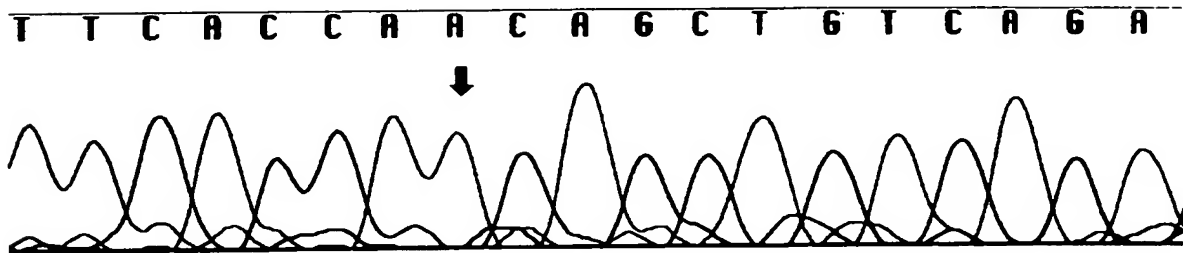


Fig. 3

Wild type
1818 1810 1800
3' - AAGTGGTCGTCGACAGTCT - 5'
GluGlyAlaAlaThrLeu

Mutant type
604 601
GluGlyValAlaThrLeu
3' - AAGTGGTTGTCGACAGTCT - 5'
3' - TTCACCAACAGCTGTCAGA - 5'
1818 1810 1800



Wild type

3' -GACGATCCCTCTTGTGTTGGAAACGACCTT-5' exon 15 | exon 14 | exon 13
 1960 1950 1940 1860 1850
 ---CCGAAATGGAACGTCTGTTT-5'
 AlaLeuLeuValPheValLysGlnGlnPhe AlaLysGlyGlnLeuCysPhe
 655 650 620 615

Mutant type

3' -GACGATCCCTCTTGTGTTGGAAACGACCTT-5' exon 15 | exon 14 | exon 13
 1960 1950 1947 1843 1830
 ---CCGAAATGGAACGTCTGTTT-5'
 TermSerPheLeuCysGlyGlnLeuCysPhe
 623 615
 3' -GACGATCCCTCTTGTGTTGGAAACGTCTGTTT-5'
 3' -CTGCTAGGAGAAACACACCCCTTGCAGACAAA-5'
 1960 1950 1947 1850 1843
 exon 15 | exon 13

deletion 91 bp

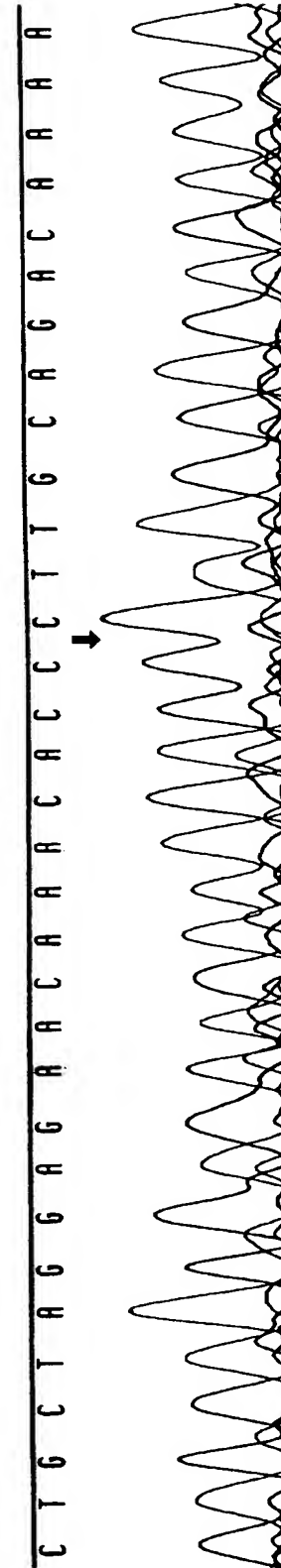


Fig. 5

	2170	2160	2150
Wild type	3' -CAACCTCGTCCCCCTACAGACTTTTG-5'		
	AsnSerCysProPro <u>His</u> ArgPheVal		
	725	720	717
	AsnSerCysProPro <u>Arg</u> ArgPheVal		
Mutant type	3' -CAACCTCGTCCCCCTGCAGACTTTTG-5'		
	3' -GTGGAGCAGGGGGGAC <u>G</u> CTCTGAAAAC-5'		
	2170	2160	2150

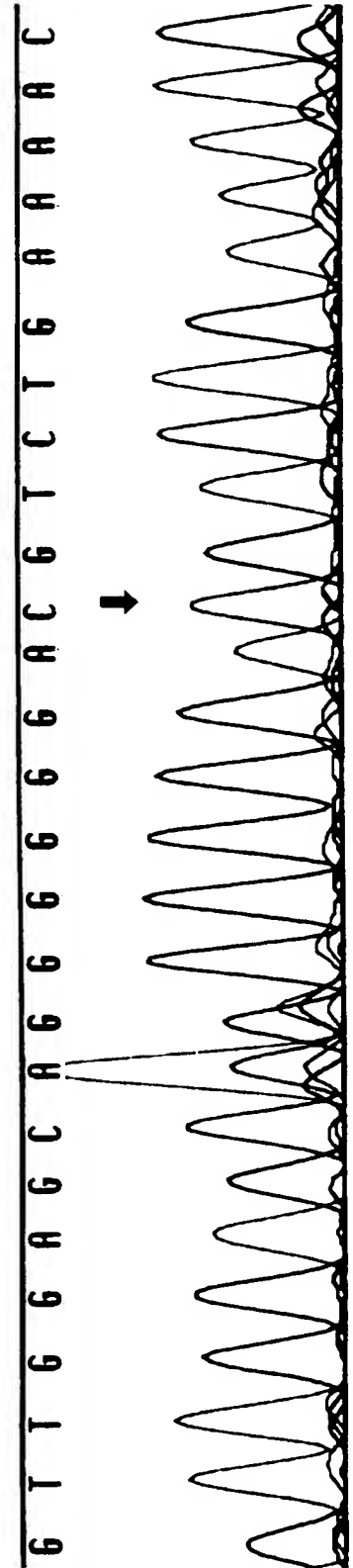
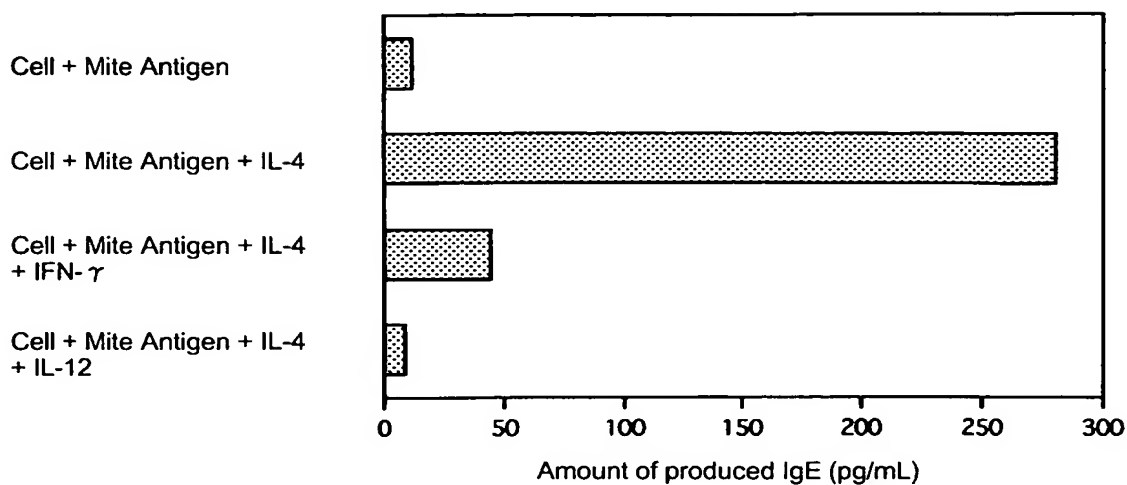
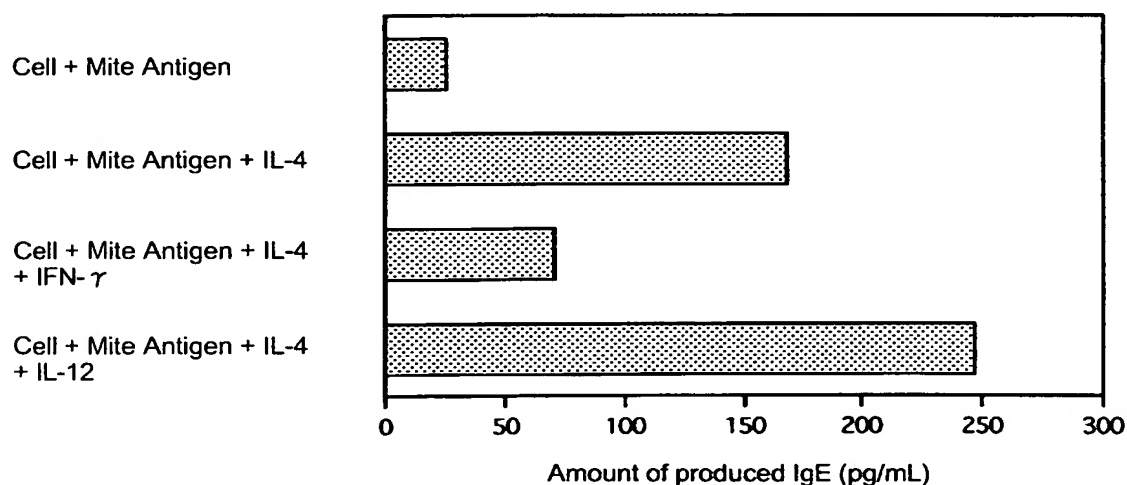


Fig. 6

a) Non-allergic subjects



b) Allergic subjects of 1856de191



c) Allergic subjects of A604V

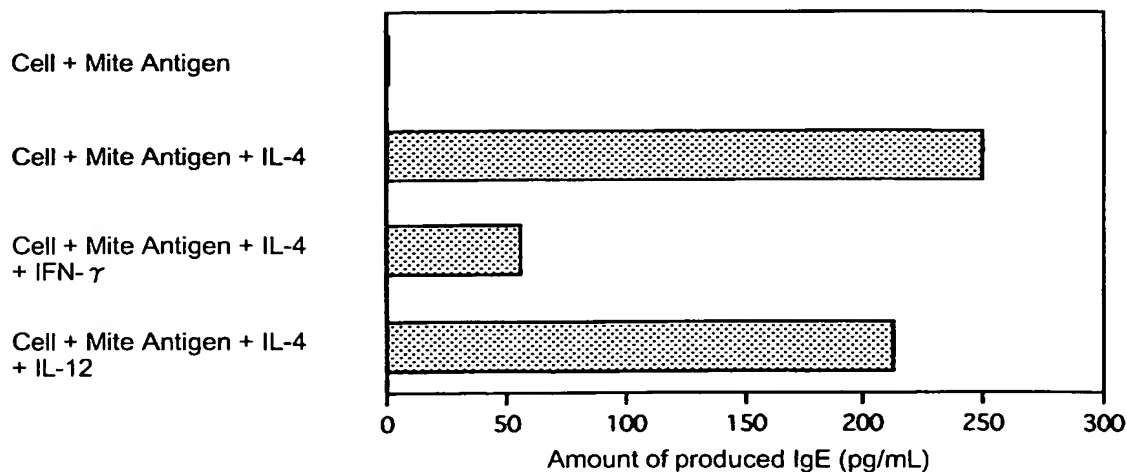


Fig. 7

358 360 364
 TrpProAla^{Arg}AlaGlnSer
 Trp
 C
 5' -ATTGGCCAGCC/GGGCTCAGAGCA-3'
 T
 1070 1080 1090

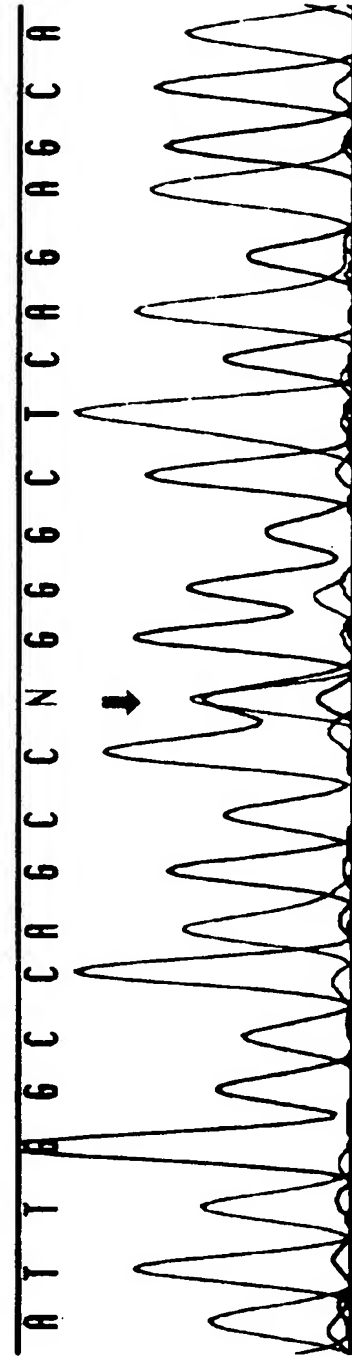


Fig. 8

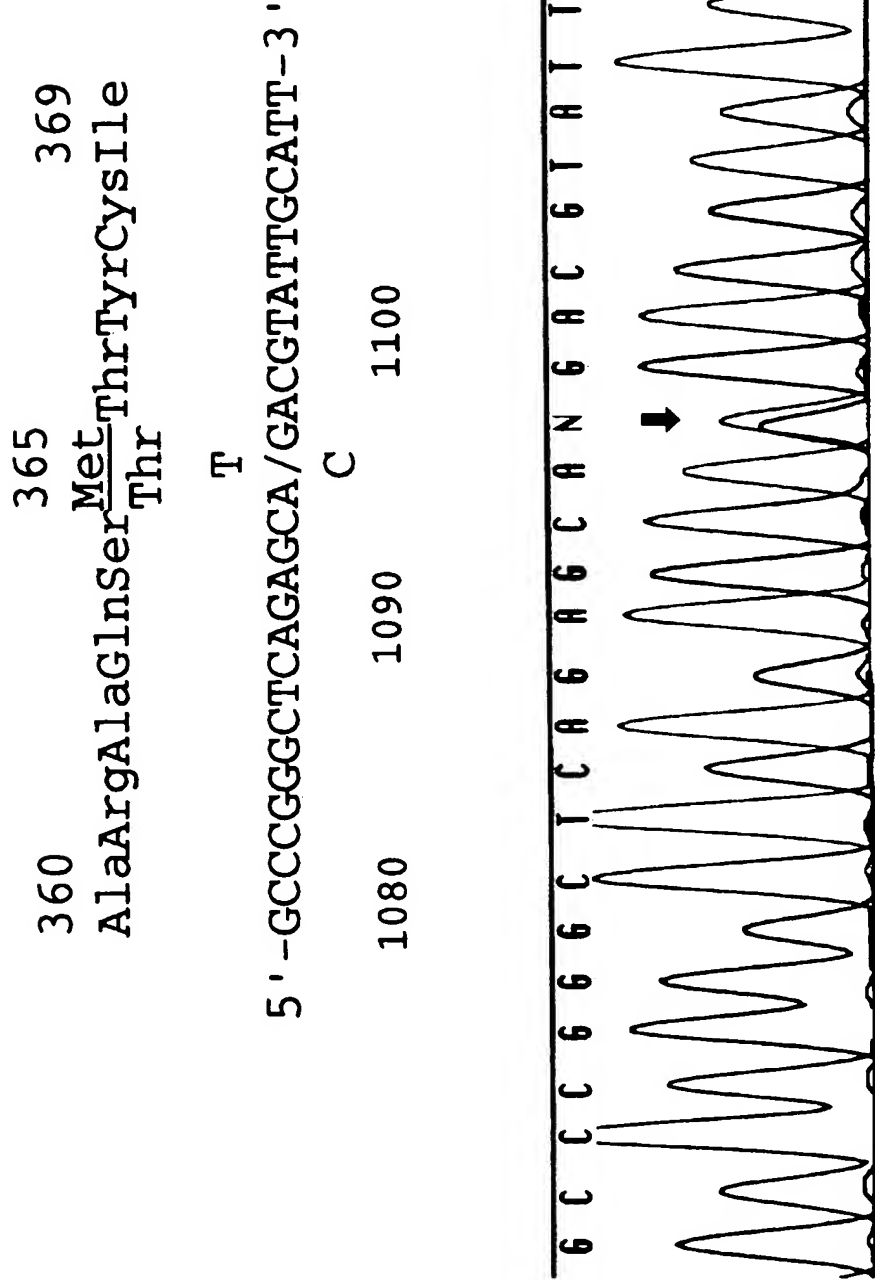


Fig. 9

375 378 380
 ProValGlyGlnAsp Gly GlyLeuAlaThrCys
 Arg

G
 5' - CCTGTGGGCCAGGAC / GGGGCCCTGGCCACCTGC - 3'
 C
 1120 1130 1140

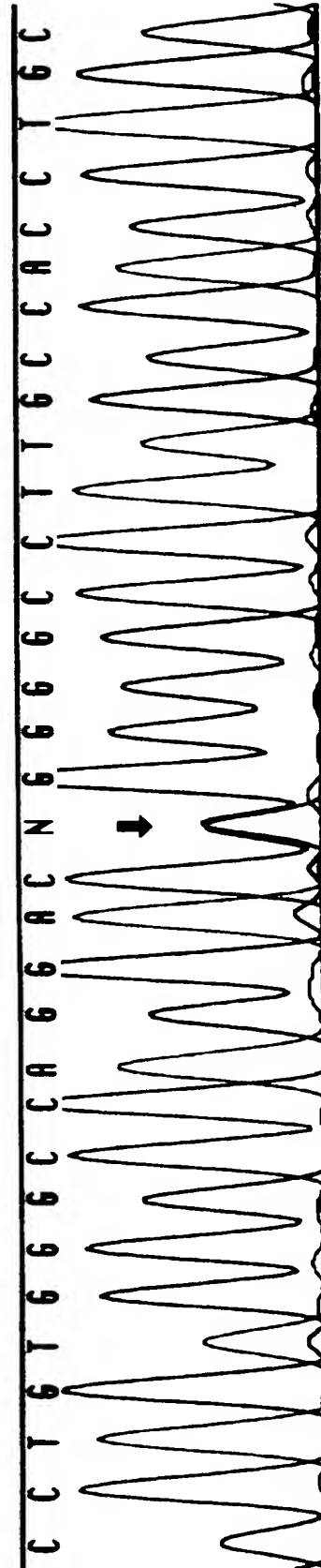
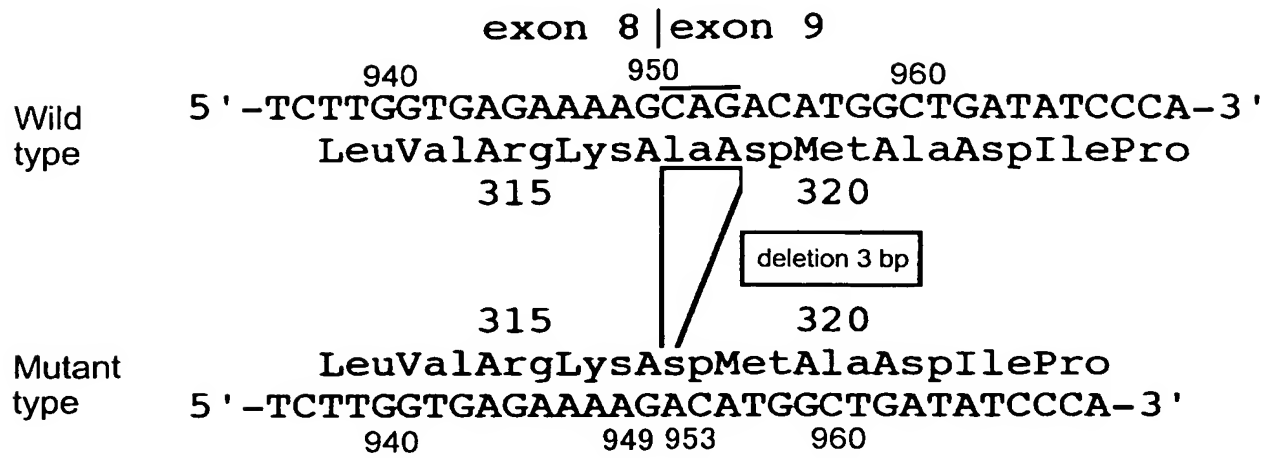


Fig. 10



TCTTGGTGAGAAAAGACATGGCTGATATCCCA
 310 320 330

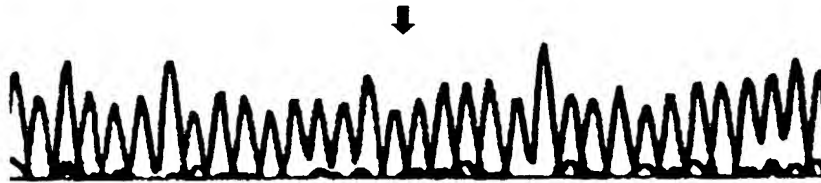
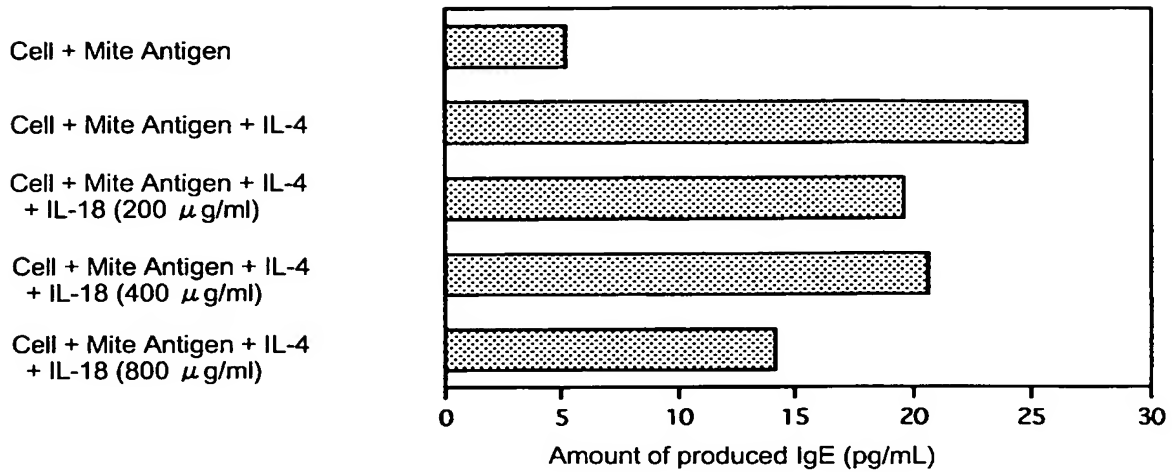


Fig. 11

a) Non-allergic subjects



b) Allergic subjects of 950de13

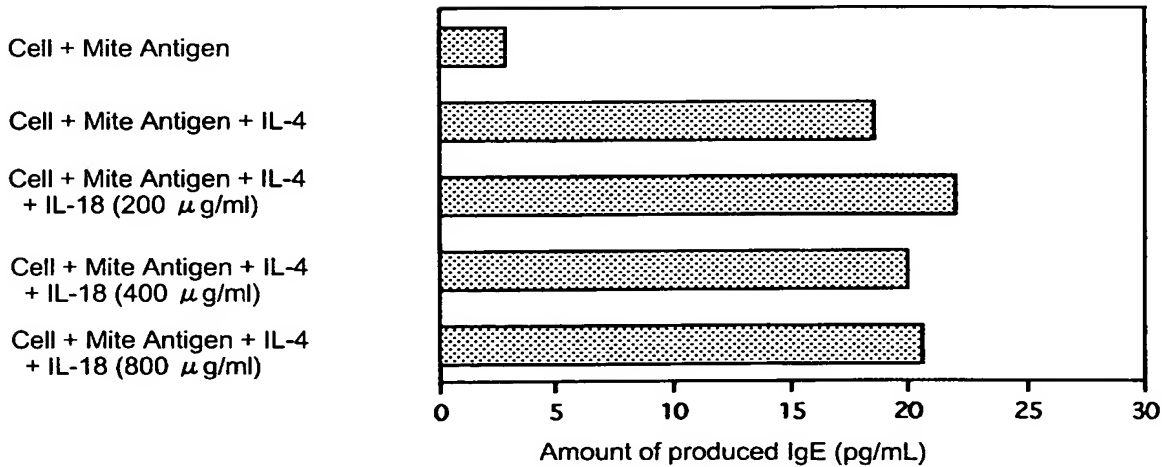


Fig. 12

	1390	1400	1410
Wild type	5' -CTAGTGGATCTACT <u>T</u> GTGGATGATAGCGGT-3'		
	LeuValAspLeu <u>Leu</u> ValAspAspSerGly		
	465	467	470
	LeuValAspLeu <u>Pro</u> ValAspAspSerGly		
Mutant type	5' -CTAGTGGATCTAC <u>C</u> TGTGGATGATAGCGGT-3'		
	1390	1400	1410

TA GTGGATCTACCTGTGGATGATAGCGGT

540 550 560

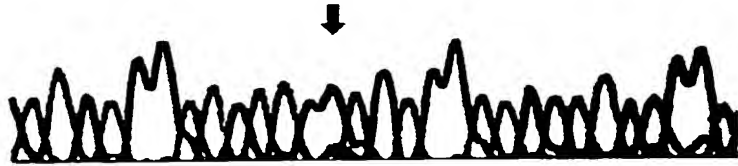


Fig. 13

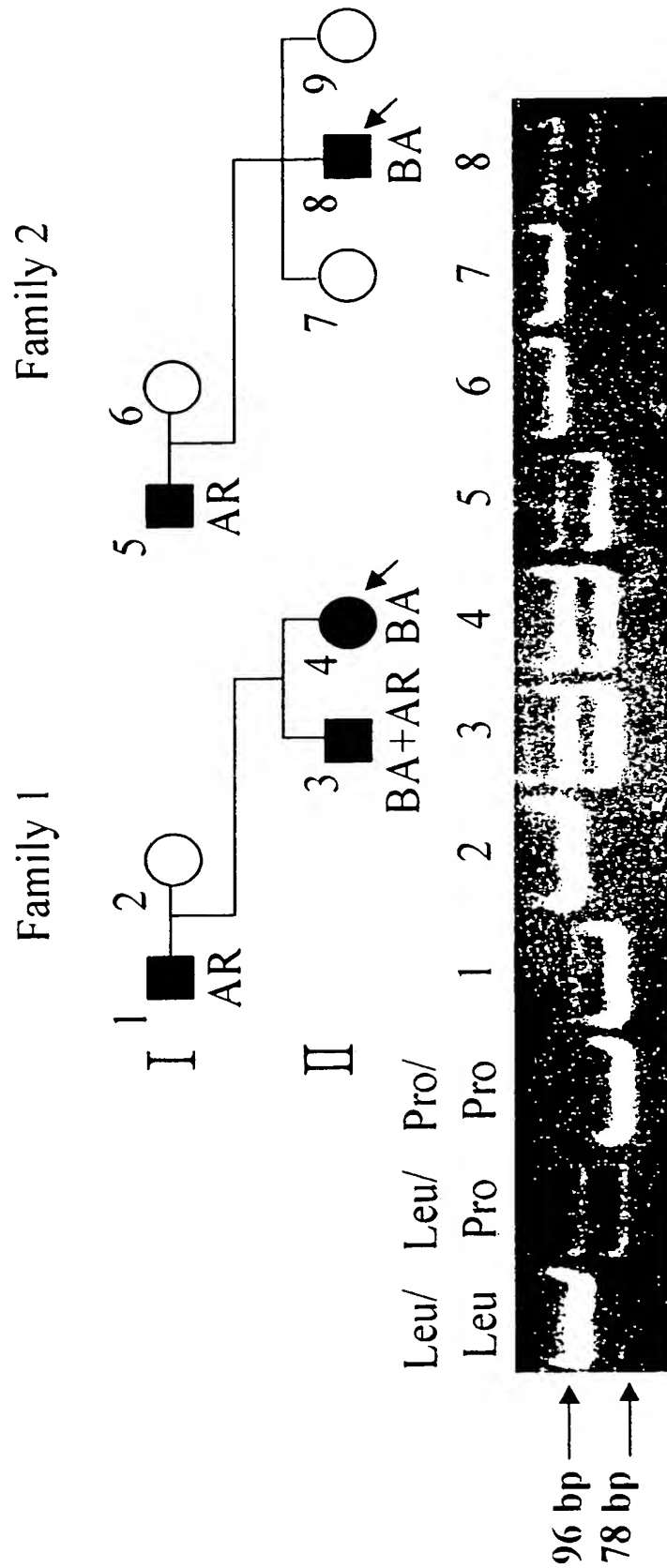


Fig. 14

3660	3670	3680	3690	3700	3710
gtgccacca	tgccatctgt	gactatatct	ttttattctt	taatagtaac	tcccttttct
			↑		
			A : 3696G/A		
3720	3730	3740	3750	3760	3770
aattaaagg	aacaaacaa	acttaaaaa	gagatgcca	ccaagcgtc	attggcatgc
				↑	
			C : 3757C/T		
3780	3790	3800	3810	3820	3830
tgatgtggc	accagtgtg	ggaagccctt	agcatactcc	aggaagtagg	agtgtgtaac
3840	3850	3860	3870	3880	3890
gtggggtccc	tttgtccctc	atgcaagggt	ttcaagagtt	tagaaaacct	atgaaattgc

Fig. 15

12310	12320	12330	12340	12350	12360	
caacagttga	ggccttacct	gccttactgg	ctacaatcac	taggaactct	ctccccaatg	
					↑	G : 12359T/G
12370	12380	12390	12400	12410	12420	
tgtaacacag	gctaatttct	gtctttgact	tcagctcttc	tgacccccaa	gggggtgacgt	
			↑			exon 5

Fig. 16

16030 16040 16050 16060 16070 16080
atgcattgca gaaacaggct cagcttacc tgtgactatg ttgccaagg gtcttcacag
↑
T : 16078C/T

16090 16100 16110 16120 16130 16140
ctttccttct cttttgcaga aagatagagt cttcacggac aagacctcag ccacggtcat
↑
exon 7

16150 16160 16170 16180 16190 16200
ctgccgcaa aatgccagca ttagcgtgcg ggcccaggac cgctactata gctcatcttg